

This listing of claims will replace all prior versions and listings of claims in the application:

Listing of Claims:

Claim 1 (original): A communications system comprising:
a wireless hub for interfacing with a network; and
an integrated Wireless Digital Subscriber Line Access Multiplexer (WDSLAM) adapted to communicate wireless data between said wireless hub and said WDSLAM via a wireless link, wherein said wireless hub has a direct access to queue utilization levels within said WDSLAM.

Claim 2 (original): The communication system of claim 1, wherein said wireless data further comprises a Code Division Multiple Access (CDMA) signal.

Claim 3 (original): The communication system of claim 1, wherein said wireless data further comprises a Time Division Multiple Access (TDMA) signal.

Claim 4 (original): The communication system of claim 1, wherein said wireless data further comprises a cellular signal.

Claim 5 (original): The communication system of claim 1, wherein said queue utilization levels further comprises Asynchronous Transfer Mode (ATM) queue utilization levels.

Claim 6 (original): The communication system of claim 1, wherein said queue utilization levels further comprises internet Protocol (IP) queue utilization levels.

Claim 7(original) The communication system of claim 1, wherein said wireless hub and WDSLAM have a single feature set.

Claim 8 (original): The communication system of claim 7, wherein said single feature set comprises an ATM feature set.

Claim 9(original): The communication system of claim 7, wherein said single feature set comprises an Internet Protocol (IP) feature set.

Claim 10 (original): The communication system of claim 1, wherein said wireless hub has access to the queue utilization levels on a per line Digital Subscriber Line (DSL) basis.

Claim 11 (original): The communication system of claim 1, wherein each queue is assigned a Quality of Service (QOS) class having a priority level.

Claim 12 (original): The communication system of claim 1, wherein said wireless hub allocates bandwidth between said wireless hub and at least one WDSLAM based on at least one of:
a quality of service (QOS) class for pre-assigning a priority and quality level to data;
a Service Level Agreement (SLA) for determining bandwidth guarantees between a user and a service provider; and
the queue utilization levels for determining queues that are at capacity.

Claim 13 (original): The communication system of claim 1, wherein said network includes an Asynchronous Transfer Mode (ATM) network.

Claim 14 (original): The communication system of claim 1, wherein said network includes an Internet Protocol (IP) network.

Claim 15 (original): The communication system of claim 1, wherein said interface is made via a digital carrier.

Claim 16 (original): The communication system of claim 15, wherein said digital carrier comprises at least one of:

- a Digital Signal Level 1 (DS1);
- a Digital Signal Level 2 (DS2); and
- a Digital Signal Level 3 (DS3).

Claim 17 (original): The communication system of claim 1, wherein said interface is made via an optical carrier.

Claim 18 (original): The communication system of claim 17, wherein said optical carrier comprises at least one of:

- an Optical Carrier Level 1 (OC-1);
- an Optical Carrier Level 3 (OC-3);
- an Optical Carrier Level 12 (OC-12);
- an Optical Carrier Level 48 (OC-48);
- an Optical Carrier Level 96 (OC-96); and
- an Optical Carrier Level 192 (OC-192).

Claim 19 (original): A method for communicating in a communication system comprising: transmitting from an integrated wireless Digital Subscriber Line Multiplexer (WDSLAM), a wireless signal, said wireless signal including status information of queue utilization levels within said WDSLAM;

- receiving said wireless signal, at a wireless hub;
- selectively allocating bandwidth to said integrated WDSLAM in response to the queue utilization level of said WDSLAM.

Claim 20 (original): The method of claim 19, wherein said step of selectively allocating bandwidth comprises determining queue utilization levels on a per line Digital Subscriber Line (DSL) basis.

Claim 21 (original): The method of claim 19, wherein said status information comprises bandwidth guarantees for data associated with a user.

Claim 22 (original): The method of claim 19, further comprising: allocating bandwidth in a weighted round robin manner among WDSLAMs in response to determining data in queues awaiting transport to said wireless hub for said WDSLAMs have the same priority level.

Claim 23 (original): The method of claim 19, further comprising: allocating bandwidth in a manner determinative of the WDSLAM having the highest queue priority level.

Claim 24 (original): The method of claim 19, wherein the greatest amount of bandwidth is assigned to the WDSLAM having queues with the highest priority and utilization level.

Claim 25 (original): The method of claim 19, wherein said wireless signal further comprises a Code Division Multiple Access (CDMA) signal.

Claim 26 (original): The method of claim 19, wherein said wireless signal further comprises a Time Division Multiple Access (TDMA) signal.

Claim 27 (original): The method of claim 19, wherein said wireless signal further comprises a cellular signal.

Claim 28 (original): The method of claim 19, wherein said queue utilization levels further comprises Asynchronous Transfer Mode (ATM) queue utilization levels.

Claim 29 (original): The method of claim 19, wherein said queue utilization levels further comprises internet Protocol (IP) queue utilization levels.

Claim 30 (original): The method of claim 19, wherein said wireless hub and WDSLAM have a single feature set.

Claim 31 (original): The method of claim 30, wherein said single feature set comprises an ATM feature set.

Claim 32 (original): The method of claim 30, wherein said single feature set comprises an Internet Protocol (IP) feature set.

Claim 33 (original): The method of claim 19, wherein said wireless hub has access to the queue utilization levels on a per line Digital Subscriber Line (DSL) basis.

Claim 34(currently amended): An apparatus for communicating in a communications system, said apparatus comprising:

an integrated wireless Digital Subscriber Line Multiplexer (WDSLAM) having an interface card for interfacing with a digital landline network and a wireless network, said interface card including:

a channel and conference module (CCM) adapted to converting a digital signal to a wireless signal;

a service specific interface field programmable gate array (SSI-FPGA) module coupled to the CCM for providing a timed digital signal to said CCM; and

a processor coupled to the SSI-FPGA for monitoring queue utilization levels and for transmitting status information of the queue utilization levels to informing a wireless hub ~~of said status information.~~

Claim 35 (original): The apparatus of claim 34 further comprising:

Digital Subscriber Line (DSL) drivers coupled to said processor for serving as an interface between said interface card and at least one subscriber.

Claim 36 (original): The apparatus of claim 35, wherein said digital signal includes an Asynchronous Transport Medium (ATM) signal.

Claim 37 (original): The apparatus of claim 36, further comprising:

an ATM chip set for storing ATM information in accordance with ATM Standards Traffic Management 4.0.

Claim 38 (original): The apparatus of claim 37, wherein said processor includes a control processor for providing ATM status information to a wireless hub.

Claim 39 (original): The apparatus of claim 35, wherein a backplane couples the CCM and the SSI-FPGA.

Claim 40 (original): The apparatus of claim 39, wherein the backplane includes a Service Specific Interface (SSI) bus.

Claim 41 (original): The apparatus of claim 38, wherein a Utopia-2 bus couples said ATM chipset, SSI-FPGA, control processor and octal line drivers.

Claim 42(original): The apparatus of claim 34, wherein said wireless signal further comprises a Code Division Multiple Access (CDMA) signal.

Claim 43 (original): The apparatus of claim 34, wherein said wireless signal further comprises a Time Division Multiple Access (TDMA) signal.

Claim 44 (original): The apparatus of claim 34, wherein said wireless signal further comprises a cellular signal.

Claim 45 (original): The apparatus of claim 35, wherein said digital signal includes an Internet Protocol (IP) signal.

Claim 46 (original): The apparatus of claim 45, wherein said processor includes a communications processor for grouping IP packets based on Quality of Service (QOS) class.

Claim 47 (original): The apparatus of claim 46, wherein said communications processor communicates status information on said IP packets to a wireless hub.

Claim 48 (original): The apparatus of claim 47, wherein a Utopia-3 bus couples said SSI-FPGA to said communications processor.

Claim 49 (currently amended): The apparatus of claim 48, wherein a plurality of serial buses couples said communications processor to a plurality ~~said~~ octal DSL line drivers.

Claim 50 (currently amended): An apparatus for communicating wireless information, comprising:

a processor and an associated storage device including instructions for controlling said processor, said ~~instruction~~ instructions, when executed, causing said processor to perform the steps of:
transmitting from an integrated wireless Digital Subscriber Line Multiplexer (WDSLAM), a wireless signal, said wireless signal including status information of queue utilization levels within said WDSLAM;
receiving said wireless signal, at a wireless hub;
selectively allocating bandwidth to said integrated WDSLAM in response to the queue utilization level of said WDSLAM.

Claim 51 (original): A method for communicating in a communication system comprising:
receiving data from a modem at an integrated wireless Digital Subscriber Line Multiplexer (WDSLAM);
assigning said data to pre-assigned queues having associated with said queues priority levels;
determining utilization levels of said queues;
transmitting from the integrated WDSLAM, a wireless signal, said wireless signal including status information of the queue utilization levels within said WDSLAM;
receiving said wireless signal, at a wireless hub;
selectively allocating bandwidth to said integrated WDSLAM in response to the queue utilization level of said WDSLAM; and
communicating wireless data to said WDSLAM based on the priority level of the queues.